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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/627,170	07/27/2000	Chung Tong	PT03452U	2322

7590 03/30/2004

Motorola Inc  
Attention Michael Zazzara  
Intellectual Property Law Department  
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EXAMINER
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KADING, JOSHUA A

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 03/30/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/627,170

Applicant(s)

TONG ET AL.

Examiner

Joshua Kading

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (U.S. Patent 5,884,185) in view of Henry Jr. et al. (U.S. Patent 6,560,453 B1).

Regarding claim 1, Kim discloses "a wireless device for transmitting packets of a message during an assigned time slot of cycles of a time-division protocol, comprising:

a housing, the housing having a first position and a second position (figures 2A and 2B; col. 3, lines 8-27 shows that when the cover is closed, the phone is in a standby mode and when the cover is opened the phone is released from standby mode and col. 3, lines 43-46 shows that while in standby mode the phone can monitor for incoming calls as is suggested by the fact that it "rings" when a call is received)..."

Young lacks "...a transmitter within the housing, the transmitter transmitting packets of the message in the assigned time slot of adjacent cycles of the protocol when the housing is in the first position and transmitting packets of the message in the assigned time slot of every nth cycle of the protocol when the housing is in the second position.

However, Henry discloses "...a transmitter within the housing, the transmitter transmitting packets of the message in the assigned time slot of adjacent cycles of the protocol when the housing is in the first position and transmitting packets of the

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message in the assigned time slot of every nth cycle of the protocol when the housing is in the second position (col. 1, lines 60-67 and col. 2, lines 1-13 where the phone can be programmed to monitor in any slot, this includes the same slot of adjacent cycles (as is commonly done in TDMA technology) or can be done at any slot interval which can include the monitoring of a slot every nth cycle; col. 4, lines 57-63 shows that the receiver is indeed a transceiver which includes the transmitting of data during the assigned time slots; it should be noted that the standby state of Kim consists of the sleep mode of Henry where the phone monitors the channel at predetermined slot intervals, i.e. when the phone is closed, it only monitors at predetermined intervals but when it is open it monitors continuously)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the alternate transmitting cycle with the housing unit for the purpose of conserving battery life. The motivation being that longer battery life, means longer phone operation.

Regarding claim 2, Kim discloses "a device for transmitting packets of a message during an assigned time slot of cycles of a time-division protocol, comprising:

a housing, the housing having at least two portions, the at least two portions being movable relative to each other (figures 2A and 2B; col. 3, lines 8-27 shows that when the cover is closed, the phone is in a standby mode and when the cover is opened the phone is released from standby mode and col. 3, lines 43-46 shows that

while in standby mode the phone can monitor for incoming calls as is suggested by the fact that it "rings" when a call is received)..."

Kim lacks "...a transmitter within the housing, the device capable of selecting a transmit duty cycle of the transmitter, the transmit duty cycle being dependent upon a position, relative to each other, of the at least two portions of the housing."

However, Henry discloses "...a transmitter within the housing, the device capable of selecting a transmit duty cycle of the transmitter, the transmit duty cycle being dependent upon a position, relative to each other, of the at least two portions of the housing (col. 1, lines 60-67 and col. 2, lines 1-13 where the phone can be programmed to monitor in any slot, this corresponds to the standby state of Kim where the phone monitors the channel at predetermined slot intervals, i.e. when the phone is closed, it only monitors at predetermined intervals but when it is open it monitors continuously; col. 4, lines 57-63 shows that the receiver is indeed a transceiver which includes the transmitting of data during the assigned time slots)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the alternate duty cycle with the housing unit for the purpose of conserving battery life. The motivation being that longer battery life, means longer phone operation.

Regarding claim 3, Kim and Henry disclose the device of claim 2. Kim lacks "the transmitter transmitting packets of the message in the assigned time slot of adjacent cycles of the time-division protocol when the at least two portions of housing are in the

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first position and the transmitter transmits packets of the message in the assigned time slot of every nth cycle of the time-division protocol when the at least two portions of housing are in the second position."

However, Henry discloses "the transmitter transmitting packets of the message in the assigned time slot of adjacent cycles of the time-division protocol when the at least two portions of housing are in the first position and the transmitter transmits packets of the message in the assigned time slot of every nth cycle of the time-division protocol when the at least two portions of housing are in the second position (col. 1, lines 60-67 and col. 2, lines 1-13 where the phone can be programmed to monitor in any slot, this includes the same slot of adjacent cycles (as is commonly done in TDMA technology) or can be done at any slot interval which can include the monitoring of a slot every nth cycle; col. 4, lines 57-63 shows that the receiver is indeed a transceiver which includes the transmitting of data during the assigned time slots; it should be noted that the standby state of Kim consists of the sleep mode of Henry where the phone monitors the channel at predetermined slot intervals, i.e. when the phone is closed, it only monitors at predetermined intervals but when it is open it monitors continuously)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the transmitting in adjacent cycles if the phone is in one position and transmitting every nth cycles if the phone is in a second position with the device of claim 2 for the same reasons and motivation as in claim 2.

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Regarding claim 4, Kim and Henry disclose the device of claim 3. Kim lacks "a controller programmable to select a value of n." However, Henry further discloses "a controller programmable to select a value of n (col. 1, lines 60-65 and col. 2, line 14 where the controller is implied to be in the mobile terminal because the user is allowed to choose the value of n, therefore the controller must be in the terminal)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the programmable controller with the device of claim 3 for the same reasons and motivation as in claim 3.

Regarding claim 5, Kim and Henry disclose the device of claim 4. Kim lacks "a keyboard, and in which the controller is programmable through use of the keyboard." However, Henry further discloses "a keyboard, and in which the controller is programmable through use of the keyboard (figure 2, elements 42, 54 and figure 3, elements 54, 74 where the keyboard is connected to the processor which is connected to memory which contains the SCI manager where SCI is defined as in claim 4)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the keyboard with the device of claim 4 for the same reasons and motivation as in claim 4.

Regarding claim 6, Kim and Henry disclose the device of claim 4. Henry lacks "a sensor coupled to the housing, and to the controller and in which the sensor detects the position of the housing." However, Kim discloses "a sensor coupled to the housing, and

to the controller and in which the sensor detects the position of the housing (figure 1, element 50; col. 3, lines 24-26 where the switch acts as a sensor).” It would have been obvious to one with ordinary skill in the art at the time of invention to include the sensor with the device of claim 4 for the same reasons and motivation as in claim 4.

Regarding claim 7, Kim and Henry disclose the device of claim 6. Henry lacks “the controller receiving a signal from the sensor regarding the position of the housing.” However, Kim discloses “the controller receiving a signal from the sensor regarding the position of the housing (figure 1, element 50 is clearly connected to CPU 30 which acts as the controller in the mobile terminal).” It would have been obvious to one with ordinary skill in the art at the time of invention to include the signal sent to the controller with the device of claim 6 for the same reasons and motivation as in claim 6.

Regarding claim 8, Kim discloses “a device having a transmitter and a housing, the housing comprised of two or more portions, at least one portion of the two or more portions movable into a plurality of positions (figures 2A and 2B; col. 3, lines 8-27 shows that when the cover is closed, the phone is in a standby mode and when the cover is opened the phone is released from standby mode and col. 3, lines 43-46 shows that while in standby mode the phone can monitor for incoming calls as is suggested by the fact that it “rings” when a call is received)...”

Kim lacks “a method of controlling a transmit duty cycle of the transmitter by a position of the at least one portion of the two or more portions of the housing,



comprising the steps of: storing in the device stored transmit duty cycles of the transmitter, one transmit duty cycle associated with one position of the plurality of positions of the at least one portion of the two or more portions of the housing, another transmit duty cycle associated with another position of the plurality of positions of the at least one portion of the two or more portions of the housing; determining a current position of the plurality of positions of the at least one portion of the two or more portions of the housing; and in response to the current position, setting a current transmit duty cycle of the transmitter to one of the stored transmit duty cycles.”

However, Henry discloses “a method of controlling a transmit duty cycle of the transmitter by a position of the at least one portion of the two or more portions of the housing, comprising the steps of: storing in the device stored transmit duty cycles of the transmitter, one transmit duty cycle associated with one position of the plurality of positions of the at least one portion of the two or more portions of the housing, another transmit duty cycle associated with another position of the plurality of positions of the at least one portion of the two or more portions of the housing (figure 2, element 54 where the SCI (duty cycle) is stored in element 54, and as per Henry the user can set modes for scanning depending on the time of day or situation the phone is operating under as can be read in col. 5, lines 53-56); determining a current position of the plurality of positions of the at least one portion of the two or more portions of the housing (figure 1, element 50 senses which position the portion is in); and in response to the current position, setting a current transmit duty cycle of the transmitter to one of the stored transmit duty cycles (col. 1, lines 60-67 and col. 2, lines 1-13 where the phone can be

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programmed to monitor in any slot, this includes the same slot of adjacent cycles (as is commonly done in TDMA technology) or can be done at any slot interval which can include the monitoring of a slot every nth cycle; it should be noted that the standby state of Kim consists of the sleep mode of Henry where the phone monitors the channel at predetermined slot intervals, i.e. when the phone is closed, it only monitors at a predetermined duty cycle but when it is open it monitor at a different duty cycle)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the duty cycle storing, determination, and transmitting with the housing unit for the purpose of conserving battery life. The motivation being that longer battery life, means longer phone operation.

Regarding claim 9, Kim and Henry disclose the method of claim 8. Kim lacks "the step of transmitting at the current transmit duty cycle of the transmitter." However, Henry further discloses "the step of transmitting at the current transmit duty cycle of the transmitter (col. 4, lines 57-63 shows that the receiver is indeed a transceiver which includes the transmitting of data at the current duty cycle)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the transmitting at the current duty cycle with the method of claim 8 for the same reasons and motivation as in claim 8.

Regarding claim 10, Kim discloses "a device having a transmitter and a housing, the housing comprised of two or more portions, the portions capable of being moved

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into more than one position relative to each other (figures 2A and 2B; col. 3, lines 8-27 shows that when the cover is closed, the phone is in a standby mode and when the cover is opened the phone is released from standby mode and col. 3, lines 43-46 shows that while in standby mode the phone can monitor for incoming calls as is suggested by the fact that it "rings" when a call is received)..."

Kim lacks "storing in the device stored transmit duty cycles of the transmitter, one stored transmit duty cycle associated with one position, another stored transmit duty cycle associated with another position (figure 2, element 54 where the SCI (duty cycle) is stored in element 54, and as per Henry the user can set modes for scanning depending on the time of day or situation the phone is operating under as can be read in col. 5, lines 53-56); determining a current position of the portions (figure 1, element 50 senses which position the portion is in); in response to the current position, setting the current transmit duty cycle of the transmitter to one of the stored transmit duty cycles (col. 1, lines 60-67 and col. 2, lines 1-13 where the phone can be programmed to monitor in any slot, this includes the same slot of adjacent cycles (as is commonly done in TDMA technology) or can be done at any slot interval which can include the monitoring of a slot every nth cycle; it should be noted that the standby state of Kim consists of the sleep mode of Henry where the phone monitors the channel at predetermined slot intervals, i.e. when the phone is closed, it only monitors at a predetermined duty cycle but when it is open it monitor at a different duty cycle); and transmitting at the current transmit duty cycle of the transmitter (col. 4, lines 57-63

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shows that the receiver is indeed a transceiver which includes the transmitting of data at the current duty cycle).”

It would have been obvious to one with ordinary skill in the art at the time of invention to include the duty cycle storing, determination, and transmitting with the housing unit for the purpose of conserving battery life. The motivation being that longer battery life, means longer phone operation.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (703) 305-0342. The examiner can normally be reached on M-F: 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JK  
March 22, 2004

Joshua Kading  
Examiner  
Art Unit 2661

  
**KENNETH VANDERPUYE  
PRIMARY EXAMINER**